

INTERNATIONAL SEARCH REPORT

International application No
PCT/US 99/28656

F24

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01H13/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G08C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 18508 A (SYNAPTICS INC) ✓ 22 May 1997 (1997-05-22) page 11, line 7 -page 12, line 16 page 43, line 4 -page 46, line 20	1-3,6-11
A	GB 2 133 957 A (INT COMPUTERS LTD) ✓ 1 August 1984 (1984-08-01) page 1, left-hand column, line 11 -page 2, right-hand column, line 126	1-10
P,A	WO 99 57630 A (SCIENTIFIC ATLANTA) ✓ 11 November 1999 (1999-11-11) page 4, line 33 -page 10, line 2	1-3,5-8

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *a* document member of the same patent family

Date of the actual completion of the international search

18 April 2000

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Name and mailing address of the ISA

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Information on patent family members

Intern: Application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9718508 A	22-05-1997	US 5889236 A CN 1202254 A EP 0861462 A JP 11511580 T	30-03-1999 16-12-1998 02-09-1998 05-10-1999
GB 2133957 A	01-08-1984	AU 557120 B AU 2379484 A US 4647916 A ZA 8400356 A	04-12-1986 02-08-1984 03-03-1987 29-08-1984
WO 9957630 A	11-11-1999	NONE	

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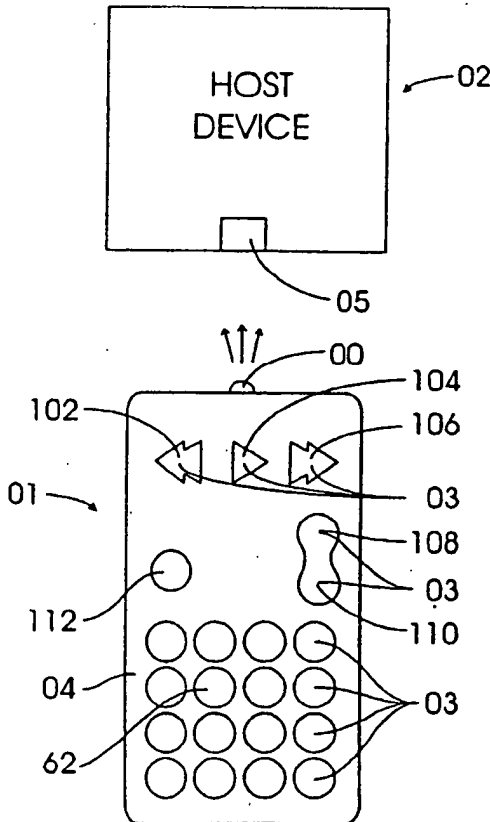
— With international search report.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(81) Designated States (national): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE,

(54) Title: REMOTE CONTROLLER WITH PRESSURE SENSITIVE BUTTONS



(57) Abstract: A remote controller for controlling a host device, the controller including a housing, an electrical power source within the housing, electronic circuitry within the housing connected to the power source and including a radiation emitter to emit signals from the housing, a plurality of finger depressible buttons exposed on the housing and interfacing with sensors electrically associated with the circuitry. The buttons are for user selection of signals emitted for controlling a host device. At least some of the sensors are utilized only as momentary-On only On/Off sensors. At least one sensor(s) is a pressure-sensitive analog sensor structured for varying electrical conductance through at least three readable states or values. The readable states are dependent upon depressive pressure applied to the sensor(s) through finger depressible button(s). The circuitry is structured to read the readable states of the pressure-sensitive analog sensor(s) and to emit signals representing the state or value of the sensor(s). In one embodiment, the analog sensor(s) is/are elastomeric dome-cap sensor(s) including pressure-sensitive variable-conductance material positioned over proximal circuit elements of the circuitry. The analog sensors are preferably associated with selectable functions such as tuner channel changing as for televisions and supportive tuner devices, and video speed controls as for VCRs, DVDs and like recorded video players, and computers and audio and other like devices. Additionally disclosed are methods of use and manufacture.

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